

## Author index of Volume 109\*

- Al-Rabeh, A., On the computational efficiency of certain upwinding schemes (1-2) 131-141
- Argyris, J. and L. Tenek, A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates (3-4) 197-218
- Baranger, J., K. Najib and D. Sandri, Numerical analysis of a three-fields model for a quasi-Newtonian flow (3-4) 281-292
- Bitoulas, N., see Papadrakakis, M. (3-4) 219-232
- Chang, C.M., see Chen, W.H. (3-4) 315-329
- Chen, W.H., C.M. Chang and J.T. Yeh, An incremental relaxation finite element analysis of viscoelastic problems with contact and friction (3-4) 315-329
- Christov, C.I. and I.T. Tzankov, Numerical investigation of the laminar boundary layer flow around an impulsively moved circular cylinder (1-2) 1- 15
- Dallner, R. and G. Kuhn, Efficient evaluation of volume integrals in the boundary element method (1-2) 95-109
- Demirdžić, I. and D. Martinović, Finite volume method for thermo-elasto-plastic stress analysis (3-4) 331-349
- Di, S. and E. Ramm, Hybrid stress formulation for higher-order theory of laminated shell analysis (3-4) 359-376
- Dutko, M., D. Perić and D.R.J. Owen, Universal anisotropic yield criterion based on superquadric functional representation: Part 1. Algorithmic issues and accuracy analysis (1-2) 73- 93
- Genna, F., Integration of plasticity equations for the case of Ziegler's kinematic hardening (1-2) 111-130
- Hagiwara, I., see Tenek, L.H. (1-2) 143-154
- Hagiwara, I., see Tenek, L.H. (1-2) 155-167
- Hugger, J., The theory of density representation of finite element meshes. Examples of density operators with quadrilateral elements in the mapped domain (1-2) 17- 39
- Hugger, J., Recovery and few parameter representation of the optimal mesh density function for near optimal finite element meshes (1-2) 41- 71
- Kaiss, A., see Le Tallec, P. (3-4) 233-258
- Kaljević, I. and S. Saigal, Stochastic boundary elements in elastostatics (3-4) 259-280
- Kuhn, G., see Dallner, R. (1-2) 95-109
- Le Tallec, P., C. Rahier and A. Kaiss, Three-dimensional incompressible viscoelasticity in large strains: Formulation and numerical approximation (3-4) 233-258
- Marotti de Sciarra, F., see Romano, G. (3-4) 293-314
- Martinović, D., see Demirdžić, I. (3-4) 331-349

\* The issue number is given in front of the page numbers.

- Najib, K., see Baranger, J. (3-4) 281-292
- Owen, D.R.J., see Dutko, M. (1-2) 73- 93
- Papadrakakis, M. and N. Bitoulas, Accuracy and effectiveness of preconditioned conjugate gradient algorithms for large and ill-conditioned problems (3-4) 219-232
- Perić, D., see Dutko, M. (1-2) 73- 93
- Poterasu, V.F., Approximate method to compute the eigenvalues and eigensensitivities of mechanical systems (1-2) 183-192
- Poterasu, V.F., see Tanaka, K. (3-4) 377-389
- Rachowicz, W., An anisotropic *h*-type mesh-refinement strategy (1-2) 169-181
- Rahier, C., see Le Tallec, P. (3-4) 233-258
- Ramm, E., see Di, S. (3-4) 359-376
- Romano, G., L. Rosati and F. Marotti de Sciarra, Variational principles for a class of finite step elastoplastic problems with non-linear mixed hardening (3-4) 293-314
- Rosati, L., see Romano, G. (3-4) 293-314
- Saigal, S., see Kaljević, I. (3-4) 259-280
- Sandri, D., see Baranger, J. (3-4) 281-292
- Sugano, Y., see Tanaka, K. (3-4) 377-389
- Tanaka, K., Y. Tanaka, H. Watanabe, V.F. Poterasu and Y. Sugano, An improved solution to thermoelastic material design in functionally gradient materials: Scheme to reduce thermal stresses (3-4) 377-389
- Tanaka, Y., see Tanaka, K. (3-4) 377-389
- Tenek, L., see Argyris, J. (3-4) 197-218
- Tenek, L.H. and I. Hagiwara, Static and vibrational shape and topology optimization using homogenization and mathematical programming (1-2) 143-154
- Tenek, L.H. and I. Hagiwara, Optimization of material distribution within isotropic and anisotropic plates using homogenization (1-2) 155-167
- Tzankov, I.T., see Christov, C.I. (1-2) 1- 15
- Vibet, C., Symbolic derivation of kinematic equations of robots via computers (3-4) 351-357
- Watanabe, H., see Tanaka, K. (3-4) 377-389
- Yeh, J.T., see Chen, W.H. (3-4) 315-329

## Subject index of Volume 109\*

### *Asymptotic methods*

- Symbolic derivation of kinematic equations of robots via computers, C. Vibet (3-4) 351-357

### *Boundary element methods*

- Efficient evaluation of volume integrals in the boundary element method, R. Dallner and G. Kuhn (1-2) 95-109  
Approximate method to compute the eigenvalues and eigensensitivities of mechanical systems, V.F. Poterasu (1-2) 183-192  
Stochastic boundary elements in elastostatics, I. Kaljević and S. Saigal (3-4) 259-280

### *Boundary layers*

- Numerical investigation of the laminar boundary layer flow around an impulsively moved circular cylinder, C.I. Christov and I.T. Tzankov (1-2) 1-15

### *Coupled problems*

- Finite volume method for thermo-elasto-plastic stress analysis, I. Demirdžić and D. Martinović (3-4) 331-349

### *Design of programs*

- Symbolic derivation of kinematic equations of robots via computers, C. Vibet (3-4) 351-357

### *Elasticity*

- Approximate method to compute the eigenvalues and eigensensitivities of mechanical systems, V.F. Poterasu (1-2) 183-192  
A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates, J. Argyris and L. Tenek (3-4) 197-218  
Stochastic boundary elements in elastostatics, I. Kaljević and S. Saigal (3-4) 259-280  
Finite volume method for thermo-elasto-plastic stress analysis, I. Demirdžić and D. Martinović (3-4) 331-349  
Hybrid stress formulation for higher-order theory of laminated shell analysis, S. Di and E. Ramm (3-4) 359-376

### *Finite difference methods*

- On the computational efficiency of certain upwinding schemes, A. Al-Rabeh (1-2) 131-141

### *Finite element and matrix methods*

- The theory of density representation of finite element meshes. Examples of density operators with quadrilateral elements in the mapped domain, J. Hugger (1-2) 17-39  
Recovery and few parameter representation of the optimal mesh density function for near optimal finite element meshes, J. Hugger (1-2) 41-71

\* The issue number is given in front of the page numbers.

- Universal anisotropic yield criterion based on superquadric functional representation: Part 1. Algorithmic issues and accuracy analysis, M. Dutko, D. Perić and D.R.J. Owen (1-2) 73-93
- An anisotropic *h*-type mesh-refinement strategy, W. Rachowicz (1-2) 169-181
- A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates, J. Argyris and L. Tenek (3-4) 197-218
- Accuracy and effectiveness of preconditioned conjugate gradient algorithms for large and ill-conditioned problems, M. Papadrakakis and N. Bitoulas (3-4) 219-232
- Three-dimensional incompressible viscoelasticity in large strains: Formulation and numerical approximation, P. Le Tallec, C. Rahier and A. Kaiss (3-4) 233-258
- Numerical analysis of a three-fields model for a quasi-Newtonian flow, J. Baranger, K. Najib and D. Sandri (3-4) 281-292
- An incremental relaxation finite element analysis of viscoelastic problems with contact and friction, W.H. Chen, C.M. Chang and J.T. Yeh (3-4) 315-329
- Hybrid stress formulation for higher-order theory of laminated shell analysis, S. Di and E. Ramm (3-4) 359-376
- Fluid mechanics*
- On the computational efficiency of certain upwinding schemes, A. Al-Rabeh (1-2) 131-141
- Approximate method to compute the eigenvalues and eigensensitivities of mechanical systems, V.F. Poterasu (1-2) 183-192
- Numerical analysis of a three-fields model for a quasi-Newtonian flow, J. Baranger, K. Najib and D. Sandri (3-4) 281-292
- Incompressible and near incompressible media*
- Three-dimensional incompressible viscoelasticity in large strains: Formulation and numerical approximation, P. Le Tallec, C. Rahier and A. Kaiss (3-4) 233-258
- Kinematics*
- Symbolic derivation of kinematic equations of robots via computers, C. Vibet (3-4) 351-357
- Material physics*
- A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates, J. Argyris and L. Tenek (3-4) 197-218
- Matrix calculus*
- Approximate method to compute the eigenvalues and eigensensitivities of mechanical systems, V.F. Poterasu (1-2) 183-192
- Nonlinear mechanics*
- Efficient evaluation of volume integrals in the boundary element method, R. Dallner and G. Kuhn (1-2) 95-109
- Variational principles for a class of finite step elastoplastic problems with non-linear mixed hardening, G. Romano, L. Rosati and F. Marotti de Sciarra (3-4) 293-314
- An incremental relaxation finite element analysis of viscoelastic problems with contact and friction, W.H. Chen, C.M. Chang and J.T. Yeh (3-4) 315-329
- Numerical solution procedures*
- The theory of density representation of finite element meshes. Examples of density operators with quadrilateral elements in the mapped domain, J. Hügger (1-2) 17-39

- Recovery and few parameter representation of the optimal mesh density function for near optimal finite element meshes, J. Hugger (1-2) 41-71
- Universal anisotropic yield criterion based on superquadric functional representation: Part 1. Algorithmic issues and accuracy analysis, M. Dutko, D. Perić and D.R.J. Owen (1-2) 73-93
- Integration of plasticity equations for the case of Ziegler's kinematic hardening, F. Genna (1-2) 111-130
- On the computational efficiency of certain upwinding schemes, A. Al-Rabeh (1-2) 131-141
- An anisotropic *h*-type mesh-refinement strategy, W. Rachowicz (1-2) 169-181
- Accuracy and effectiveness of preconditioned conjugate gradient algorithms for large and ill-conditioned problems, M. Papadrakakis and N. Bitoulas (3-4) 219-232
- Finite volume method for thermo-elasto-plastic stress analysis, I. Demirdžić and D. Martinović (3-4) 331-349
- Optimization*
- Static and vibrational shape and topology optimization using homogenization and mathematical programming, L.H. Tenek and I. Hagiwara (1-2) 143-154
- Optimization and design of structures*
- Optimization of material distribution within isotropic and anisotropic plates using homogenization, L.H. Tenek and I. Hagiwara (1-2) 155-167
- An improved solution to thermoelastic material design in functionally gradient materials: Scheme to reduce thermal stresses, K. Tanaka, Y. Tanaka, H. Watanabe, V.F. Poterasu and Y. Sugano (3-4) 377-389
- Plasticity*
- Universal anisotropic yield criterion based on superquadric functional representation: Part 1. Algorithmic issues and accuracy analysis, M. Dutko, D. Perić and D.R.J. Owen (1-2) 73-93
- Efficient evaluation of volume integrals in the boundary element method, R. Dallner and G. Kuhn (1-2) 95-109
- Integration of plasticity equations for the case of Ziegler's kinematic hardening, F. Genna (1-2) 111-130
- Variational principles for a class of finite step elastoplastic problems with non-linear mixed hardening, G. Romano, L. Rosati and F. Marotti de Sciarra (3-4) 293-314
- Finite volume method for thermo-elasto-plastic stress analysis, I. Demirdžić and D. Martinović (3-4) 331-349
- Shells and plates*
- Optimization of material distribution within isotropic and anisotropic plates using homogenization, L.H. Tenek and I. Hagiwara (1-2) 155-167
- A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates, J. Argyris and L. Tenek (3-4) 197-218
- Hybrid stress formulation for higher-order theory of laminated shell analysis, S. Di and E. Ramm (3-4) 359-376
- Solution of differential equations*
- On the computational efficiency of certain upwinding schemes, A. Al-Rabeh (1-2) 131-141
- Solutions of ordinary and partial differential equations*
- On the computational efficiency of certain upwinding schemes, A. Al-Rabeh (1-2) 131-141

*Stochastic processes*

- Stochastic boundary elements in elastostatics, I. Kaljević and S. Saigal (3-4) 259-280

*Structural mechanics*

- A natural triangular layered element for bending analysis of isotropic, sandwich, laminated composite and hybrid plates, J. Argyris and L. Tenek (3-4) 197-218
- Variational principles for a class of finite step elastoplastic problems with non-linear mixed hardening, G. Romano, L. Rosati and F. Marotti de Sciarra (3-4) 293-314
- An incremental relaxation finite element analysis of viscoelastic problems with contact and friction, W.H. Chen, C.M. Chang and J.T. Yeh (3-4) 315-329
- Hybrid stress formulation for higher-order theory of laminated shell analysis, S. Di and E. Ramm (3-4) 359-376

*Systems of linear and nonlinear simultaneous equations*

- Accuracy and effectiveness of preconditioned conjugate gradient algorithms for large and ill-conditioned problems, M. Papadrakakis and N. Bitoulas (3-4) 219-232

*Viscoelastic and viscoplastic media*

- Three-dimensional incompressible viscoelasticity in large strains: Formulation and numerical approximation, P. Le Tallec, C. Rahier and A. Kaiss (3-4) 233-258
- An incremental relaxation finite element analysis of viscoelastic problems with contact and friction, W.H. Chen, C.M. Chang and J.T. Yeh (3-4) 315-329

*Viscous flow*

- Numerical analysis of a three-fields model for a quasi-Newtonian flow, J. Baranger, K. Najib and D. Sandri (3-4) 281-292

*Workhardening structures*

- Integration of plasticity equations for the case of Ziegler's kinematic hardening, F. Genna (1-2) 111-130



